## **ED Web Metadata**

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## Metadata Scheme & Elements

- Developed in 2000-2001 for new information architecture for www.ed.gov and 100+ EDfunded sites
- Dublin Core with ED-specific extensions
  - ED Programs, Activities & Initiatives
  - ED Office
  - Content Owner
  - Content Date
  - Archive/Update Date/Action
  - Records Management
  - Sensitivity/Privacy
- Predates dc.audience

## Constructing the Vocabularies

- Analyzed user search terms
- Consulted existing authorities (ERIC, other)
- Mapped terms
- Constructed thesaurus
  - Z39.19 structure
  - non-preferred terms, definitions
- Vetted with ED offices
- Retired unused terms to streamline lists after 1<sup>st</sup> year
- Ongoing disambiguation, extension

## **Authorities Consulted**

- Search.ed.gov User Query Terms
- ERIC Thesaurus, Identifier Authority List, Target Audiences, Publication Types
- ED Web Information Architecture & Topics A-Z
- ED Pubs On-Line Ordering System
- Education Resource Organizations Directory (EROD)
- Guide to US Department of Education Programs
- ED Internet Customer Survey categories
- OERI: Website Topical Index, Web Policy Group --Proposed Research Focus Topics, & Publication Plan Database
- NCES: CCD National Public School Locator, College Opportunities On-Line, Digest of Education Statistics, Encyclopedia of ED Stats, and Staff Directory
- A Pilot Standard National Course Classification System for Secondary Education
- AskERIC Topic List
- Reading Pathfinder
- Ted Brandhorst Correspondence with Jim Clemmens re Lab Products
- ED Principal Office suggestions & review

- Eisenhower Math/Science Clearinghouse
- Gateway to Educational Materials (GEM)
- National Center for the Dissemination of Disability Research (NCDDR)
- National Rehabilitation Information Center (NARIC)
- National Institute for Literacy (NIFL)—Adult Literacy
   Thesaurus & Literacy Information and Communication
   System (LINCS)
- Think College Early Database of Early College Awareness
- Directory of Resources for Foreign Language Programs
- Draft IEEE Standard for Learning Object Metadata
- Dublin Core Metadata Initiative
- Education Network Australia (EdNA)
- International Standard Classification of Education (ISCED) UNESCO Thesaurus
- State of Victoria, Australia -- Dept of Education, Employment, and Training
- Alexandria Digital Library Object Type Thesaurus
- California Environmental Resources Evaluation System (CERES)
- Yahoo and Dmoz Education Subject Directories

# Mapping Terms

#### **User Vocabulary**

average class size class size class reduction

classroom size overcrowding

reducing class size small class size smaller class size class size reduction smaller classrooms student teacher ratio

#### **Controlled Vocabularies**

ERIC: Class Size

**Small Classes** 

NCES: Pupil-Teacher Ratio

Class Size (elem/sec)

EROD: **Teacher Student Ratios** 

ED Pubs: Class Size

Topics A-Z: Class Size Reduction

#### **ED Web Terms**

Class Size miniature Classes

## Term Assignment to Resources

- How metadata is assigned at ED
  - By non-expert content providers with review by non-expert editors

### Tools

- Content management
  - workflow & metadata form
- Metadata reference
  - http://www.ed.gov/admin/reference/index.jsp
- Oracle & Term Use queries

## Metadata Form

List of Files	Global Metadata for Files			
/rschstat/eval/other / /cclcfinalreport/ccl cfinal.pdf	Help Clickfor described help on all form	Click for help>	Help	
	Neide.  Use Preferences	No Prefs Found	Use Preferences	
	Click to pre-populate the form based on your preferences file.			
	Copy Metadata	Click to Copy>	Copy Metadata	_
	Click to pre-populate the form already assigned to arother file			
	Identifier (*)	http://www.ed.gow/rschstat/eval/other/ccicfinalre		Copy Identifier
	Enter URL for resource as it will appear on live site. Doublecheck your typing			
	Title (*) =	>		Copy Title
	Briter countie, unique title. Title will be first line in search results and helps were select relevant resources. Ten appears in < TITLE >			
	Publication ID	Ţ.		
	Frecurse is publication, enter the Publication ID. Fa Publication ID is entered then the Sort Order must also be entered.			
	Sort Order		Ì	
	Anter the placement of the chapter in relation to others (must be a number > 0).			
	Creator/Author	ſ	Ī	
	Poter full name of creator () leasther (i) leat name first. Separate multiple entries with semicolons.			
	Contributor	Γ		
	Brier full name of secondary contributor(s), has name first. Separate multiple extrict with semicoloru.			
	Description (*)	>		
	Briter brief description of resource. Description appears in search results under title and helps wers			

### ED Metadata Fields

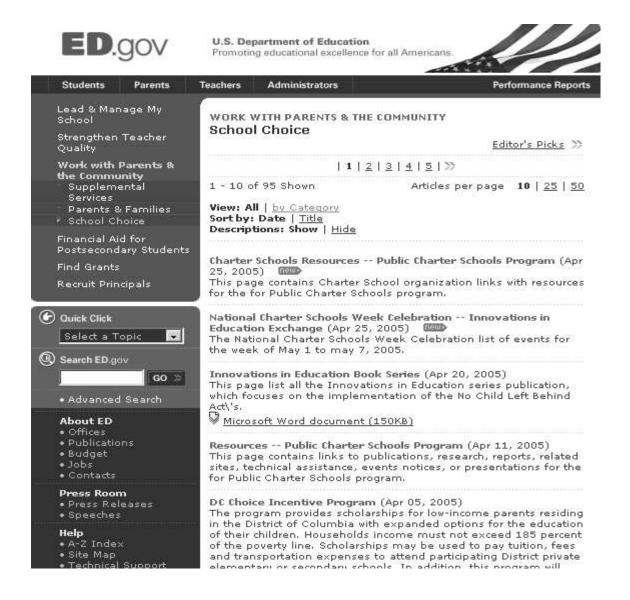
- Identifier
- Title
- Publication ID
- Sort Order
- Creater/Author
- Contributor
- Description
- Subject
- ED Program/Activity /Initiative
- Level of Education
- End User
- Mediator

- Resource Type
- Format
- Language
- Content Date
- ED Principal Office
- Publisher
- Content Owner Email
- Next Archive/Update Date
- Next Archive/Update Action
- Status
- Rights Management
- Sensitivity/Privacy
- Verify Entries

### Metadata Uses at ED

- Information architecture (Oracle)
  - Audience/Topic drill-down
    - View all resources (facets)
  - Programs
- Search engine
  - Embedded meta tags to improve relevance/precision
  - Date sort
  - Synonyms
  - "see also" suggestions in search results
- Content management
  - Owner, office, archive/update actions/reminders
- Personalization (discontinued)
- XML export
- Alignment with other ED systems: AskED, EROD, GTEP, EDPubs

# Audience/Topic Drilldown



## Programs



U.S. Department of Education

Promoting educational excellence for all Americans.



Students

Parents

Teachers

Administrators

Performance Reports



#### OVERVIEW

ED administers programs authorized and funded by Congress. These programs provide financial aid for eligible applicants for elementary, secondary, and college education; for the education of individuals with disabilities and of those who are illiterate, disadvantaged, or gifted; and for the education of immigrants, American Indians, and people with limited English proficiency.

Here you'll find information about <u>each ED program</u>: its <u>purpose</u>, who is <u>eliqible</u> to apply, and more.

#### Feature



#### ED Programs

Sort programs by subject, title, or eligibility. See the purpose, funding, guidance, and contact for each. GO >

#### **ED Performance Reports**

See performance and accountability reports on ED and its programs. <u>GO ></u>

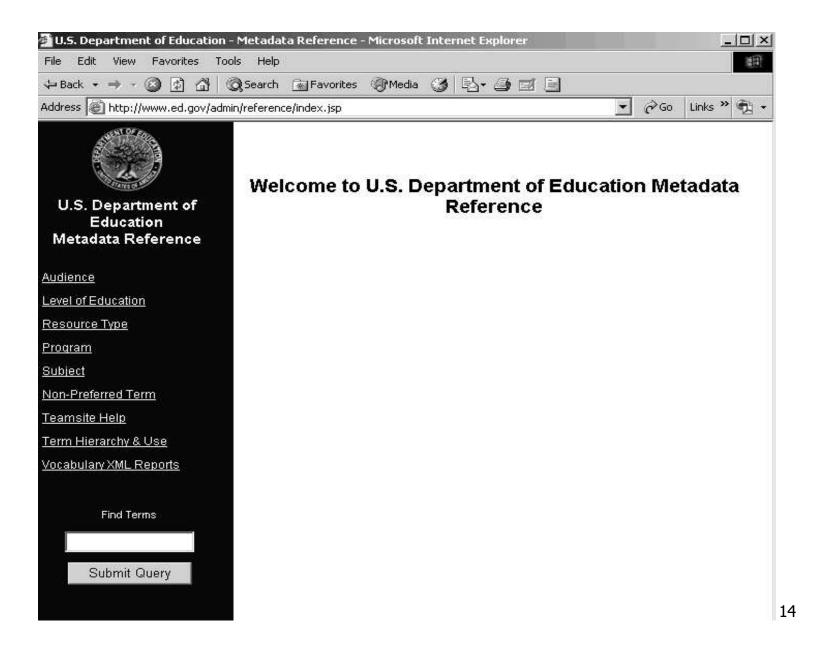
# Metadata Program Example



#### SEARCH Search Results

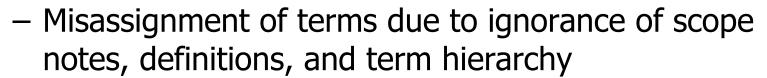
C New Search	
Search Within Results     □	io »
Search Within Results	
Help with Search	
Search Results for: Jobs  -ed.status:archived	
Page   1   2   3   4   5	Next >>
	25   50
View: All   See also Sort by: Relevance   Date   Title Descriptions: Show   Hide	
Job Corps Learn about Job Corps, a residential education and job trai program for at-risk youth, ages 16 through 24. (Feb 15, 20	
ED and Federal Job Opportunities Job listings for the Department of Education. (Jul 12, 2001	)
Legislation, Regulations, and Guidance Grants to States Workplace and Community This page lists statutes, regulations, legislation, policy guid and flexibility provisions for the Grants to States (Mar 13	dance,
Page   1   <u>2</u>   <u>3</u>   <u>4</u>   <u>5</u>	Next >>
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₩ See Also:	
Employment	
Employers	
Economic Impact	
Job Training	
Employment Opportunities	
Tenure	
Education Work Relationship	
Personnel	
Work Attitudes	
Careers	
Occupations	
Labor Force	

### Metadata Reference

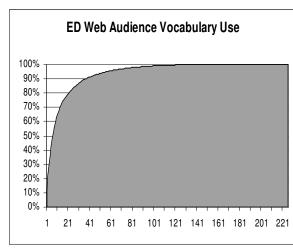


# Trends & Surprises

- Distribution/concentration of term assignments
- Low- and no-occurrence terms
- Content provider weaknesses



- E.g., Other Notices, Individuals, Department Heads
- Weak comprehension of elements beyond subject
  - audience, resource type, level



### For More Information

- ED Web Metadata Reference
  - http://www.ed.gov/admin/reference/index.jsp
- Element, Vocabulary & Format Definitions
  - http://www.ed.gov/internal/EDWebMetadata/index.html
- Contacts
  - Keith Stubbs keith.stubbs@ed.gov
  - Shelia Hamblin shelia.hamblin@ed.gov